

114TH CONGRESS
1ST SESSION

H. R. 3585

To authorize surface transportation research and development programs, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 22, 2015

Mrs. COMSTOCK (for herself, Mr. SMITH of Texas, Mr. MOOLENAAR, Mr. LUCAS, Mr. HULTGREN, Mr. WESTERMAN, and Mr. ABRAHAM) introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committee on Transportation and Infrastructure, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To authorize surface transportation research and development programs, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Surface Transpor-
5 tation Research and Development Act of 2015”.

6 **SEC. 2. FINDINGS.**

7 Congress makes the followings findings:

1 (1) Federal transportation research and devel-
2 opment planning and coordination—

3 (A) should occur within the Office of the
4 Secretary of Transportation; and

5 (B) should be, to the extent practicable,
6 multimodal and not occur solely within the sub-
7 agencies of the Department of Transportation.

8 (2) Managing a multimodal research and devel-
9 opment portfolio within the Office of the Secretary
10 will—

11 (A) help identify opportunities where re-
12 search could be applied across modes; and

13 (B) prevent duplication of efforts and
14 waste of limited Federal resources.

15 (3) Increasing transparency of transportation
16 research and development efforts will—

17 (A) build stakeholder confidence in the
18 final product; and

19 (B) lead to the improved implementation
20 of research and development findings.

21 **SEC. 3. TRANSPORTATION RESEARCH AND DEVELOPMENT**

22 **5-YEAR STRATEGIC PLAN.**

23 (a) IN GENERAL.—The Secretary of Transportation
24 shall develop a 5-year transportation research and devel-
25 opment strategic plan for fiscal years 2018 through 2022

1 to guide future Federal transportation research and devel-
2 opment activities.

3 (b) CONSISTENCY.—The strategic plan developed
4 under subsection (a) shall be consistent with—

5 (1) section 306 of title 5, United States Code;

6 (2) sections 1115 and 1116 of title 31, United
7 States Code; and

8 (3) any other research and development plan
9 within the Department of Transportation.

10 (c) CONTENTS.—The strategic plan developed under
11 subsection (a) shall—

12 (1) describe the primary purposes of the trans-
13 portation research and development program, which
14 shall include—

15 (A) improving mobility of people and
16 goods;

17 (B) reducing congestion;

18 (C) promoting safety; and

19 (D) improving the durability and extending
20 the life of transportation infrastructure;

21 (2) for each of the purposes referred to in para-
22 graph (1), list the proposed research and develop-
23 ment activities that the Department of Transpor-
24 tation intends to pursue to accomplish that purpose,
25 which may include—

1 (A) fundamental research pertaining to the
2 applied physical and natural sciences;

3 (B) applied science and research;

4 (C) technology development research; and

5 (D) social science research; and

6 (3) for each research and development activ-
7 ity—

8 (A) identify the anticipated annual funding
9 levels for the period covered by the strategic
10 plan; and

11 (B) describe the research findings the De-
12 partment of Transportation expects to discover
13 at the end of the period covered by the strategic
14 plan.

15 (d) CONSIDERATIONS.—The Secretary shall ensure
16 that the strategic plan developed under this section—

17 (1) reflects input from external stakeholders;

18 (2) includes and integrates the research and de-
19 velopment programs of all of the Department of
20 Transportation's modal administrations and joint
21 programs;

22 (3) takes into account research and develop-
23 ment by other Federal, State, local, private sector,
24 and nonprofit institutions; and

1 (4) is published on a public website by Decem-
2 ber 31, 2016.

3 (e) REPORT.—

4 (1) NATIONAL RESEARCH COUNCIL REVIEW.—

5 The Secretary shall enter into an agreement with
6 the National Research Council for a review and
7 analysis of the Department’s 5-year research and de-
8 velopment strategic plan described in this section.
9 By March 31, 2017, the Secretary shall publish on
10 a public website the National Research Council’s
11 analysis of the Department’s plan.

12 (2) INTERIM REPORT.—By June 30, 2019, the
13 Secretary shall publish on a public website an in-
14 terim report that—

15 (A) provides an assessment of the Depart-
16 ment’s 5-year research and development stra-
17 tegic plan described in this section that includes
18 a description of the extent to which the re-
19 search and development is or is not successfully
20 meeting the purposes described under sub-
21 section (c)(1); and

22 (B) addresses any concerns and identifies
23 any gaps that may have been raised by the Na-
24 tional Research Council analysis under para-
25 graph (1), including how the plan is or is not

1 responsive to the National Research Council re-
2 view.

3 (f) TECHNICAL AND CONFORMING AMENDMENTS.—

4 (1) CHAPTER 5 OF TITLE 23.—Chapter 5 of
5 title 23, United States Code, is amended—

6 (A) by striking section 508;

7 (B) in the table of contents, by striking the
8 item relating to section 508;

9 (C) in section 502—

10 (i) in subsection (a)(9), by striking
11 “transportation research and technology
12 development strategic plan developed under
13 section 508” and inserting “transportation
14 research and development strategic plan
15 under section 3 of the Surface Transpor-
16 tation Research and Development Act of
17 2015”; and

18 (ii) in subsection (b)(4), by striking
19 “transportation research and development
20 strategic plan of the Secretary developed
21 under section 508” and inserting “trans-
22 portation research and development stra-
23 tegic plan under section 3 of the Surface
24 Transportation Research and Development
25 Act of 2015”; and

1 (D) in section 512(b), by striking “as part
2 of the transportation research and development
3 strategic plan developed under section 508”.

4 (2) INTELLIGENT TRANSPORTATION SYS-
5 TEMS.—The Intelligent Transportation Systems Act
6 of 1998 (23 U.S.C. 502 note) is amended—

7 (A) in section 5205(b), by striking “as
8 part of the Surface Transportation Research
9 and Development Strategic Plan developed
10 under section 508 of title 23, United States
11 Code” and inserting “as part of the transpor-
12 tation research and development strategic plan
13 under section 3 of the Surface Transportation
14 Research and Development Act of 2015”; and

15 (B) in section 5206(e)(2)(A), by striking
16 “or the Surface Transportation Research and
17 Development Strategic Plan developed under
18 section 508 of title 23, United States Code”
19 and inserting “or the transportation research
20 and development strategic plan under section 3
21 of the Surface Transportation Research and
22 Development Act of 2015”.

23 (3) INTELLIGENT TRANSPORTATION SYSTEM
24 RESEARCH.—Subtitle C of title V of the Safe, Ac-
25 countable, Flexible, Efficient Transportation Equity

1 Act: A Legacy for Users (23 U.S.C. 512 note) is
2 amended—

3 (A) in section 5305(h)(3)(A), by striking
4 “the strategic plan under section 508 of title
5 23, United States Code” and inserting “the 5-
6 year transportation research and development
7 strategic plan under section 3 of the Surface
8 Transportation Research and Development Act
9 of 2015”; and

10 (B) in section 5307(c)(2)(A), by striking
11 “or the surface transportation research and de-
12 velopment strategic plan developed under sec-
13 tion 508 of title 23, United States Code” and
14 inserting “or the 5-year transportation research
15 and development strategic plan under section 3
16 of the Surface Transportation Research and
17 Development Act of 2015”.

18 **SEC. 4. ANNUAL RESEARCH PLANS AND RESEARCH AB-**
19 **STRACT DATABASE.**

20 (a) IN GENERAL.—Not later than May 1 of each
21 year, the head of each modal administration and joint pro-
22 gram office of the Department of Transportation shall
23 submit a comprehensive annual research plan for the fiscal
24 year following the upcoming fiscal year to the Assistant
25 Secretary for Research and Technology of the Department

1 of Transportation (referred to in this section as the “As-
2 sistant Secretary”). Each plan submitted under this sub-
3 section, after 2016, shall be consistent with the strategic
4 plan developed under section 3.

5 (b) REVIEW.—

6 (1) IN GENERAL.—Not later than September 1
7 of each year, the Assistant Secretary, for each plan
8 submitted pursuant to subsection (a), shall—

9 (A) review the scope of the research; and

10 (B)(i) approve the plan; or

11 (ii) request that the plan be revised and re-
12 submitted for approval.

13 (2) PUBLICATIONS.—Not later than January
14 30 of each year, the Assistant Secretary shall pub-
15 lish on a public website each plan that has been ap-
16 proved under paragraph (1)(B)(i).

17 (3) REJECTION OF DUPLICATIVE RESEARCH EF-
18 FORTS.—The Assistant Secretary may not approve
19 any plan submitted by the head of a modal adminis-
20 tration or joint program office pursuant to sub-
21 section (a) if such plan duplicates significant aspects
22 of research projects of any other modal administra-
23 tion.

24 (c) FUNDING LIMITATIONS.—No funds may be ex-
25 pended by the Department of Transportation on research

1 that has not previously been approved as part of a re-
2 search plan approved by the Assistant Secretary unless—

3 (1) such research is required by an Act of Con-
4 gress;

5 (2) such research was part of a contract that
6 was funded before the date of enactment of this Act;

7 or

8 (3) the Secretary of Transportation certifies to
9 Congress that such research is necessary and pro-
10 vides justification for the certification.

11 (d) DUPLICATIVE RESEARCH.—

12 (1) IN GENERAL.—Except as provided in para-
13 graph (2), no funds may be expended by the Depart-
14 ment of Transportation on more than one research
15 project that the Assistant Secretary identifies as du-
16 plicative under subsection (b)(3).

17 (2) EXCEPTIONS.—Paragraph (1) shall not
18 apply to—

19 (A) research commissioned before the date
20 of enactment of this Act;

21 (B) updates to previously commissioned re-
22 search, including replication studies; or

23 (C) research specifically required by law.

24 (e) RESEARCH ABSTRACT DATABASE.—

1 (1) IN GENERAL.—The Assistant Secretary
2 shall annually publish on a public website a com-
3 prehensive database of all research projects con-
4 ducted by the Department of Transportation, includ-
5 ing, to the extent practicable, research funded
6 through University Transportation Centers.

7 (2) CONTENTS.—The database published under
8 paragraph (1) shall—

9 (A) include the research plans approved
10 under subsection (b)(1)(B)(i);

11 (B) describe the research objectives,
12 progress, findings, and allocated funds for each
13 research project;

14 (C) identify research projects with
15 multimodal applications;

16 (D) specify how relevant modal administra-
17 tions have assisted, will contribute to, or plan
18 to use the findings from the research projects
19 identified under paragraph (1);

20 (E) identify areas in which more than 1
21 modal administration is conducting research on
22 a similar subject or a subject which has a bear-
23 ing on more than 1 mode;

24 (F) describe the interagency and cross-
25 modal communication and coordination that has

1 occurred to develop the research plans approved
2 under subsection (b)(1)(B)(i), and to prevent
3 duplication of research projects within the De-
4 partment of Transportation;

5 (G) indicate how the findings of research
6 are being disseminated to improve the effi-
7 ciency, effectiveness, and safety of transpor-
8 tation systems; and

9 (H) describe the specific content and
10 sources of public and stakeholder input to the
11 research plans approved under subsection
12 (b)(1)(B)(i).

13 (f) FUNDING REPORT.—In conjunction with each of
14 the President’s annual budget requests under section 1105
15 of title 31, United States Code, the Secretary of Transpor-
16 tation shall submit to Congress and annually publish on
17 a public website a report that describes—

18 (1) the amount spent in the last completed fis-
19 cal year on each transportation research and devel-
20 opment project; and

21 (2) the amount that the Secretary plans or esti-
22 mates the Department will spend during the current
23 fiscal year on each transportation research and de-
24 velopment project.

1 **SEC. 5. TRAFFIC CONGESTION.**

2 (a) WORKING GROUP.—The Secretary of Transpor-
3 tation shall establish a working group consisting of appro-
4 priate representatives from the different modal adminis-
5 trations of the Department of Transportation, chaired by
6 the Assistant Secretary of Transportation for Research
7 and Technology, to design, develop, and propose a pro-
8 gram of research on the reduction of traffic congestion.

9 (b) DUTIES.—The working group established under
10 subsection (a), shall—

11 (1) establish goals and objectives for the pro-
12 gram under this section;

13 (2) recommend research to accelerate the adop-
14 tion of transportation management systems that
15 allow traffic to flow in the safest and most efficient
16 manner possible while alleviating current and future
17 traffic congestion challenges;

18 (3) assess and analyze traffic, transit, and
19 freight data from various sources relevant to efforts
20 to reduce traffic congestion so as to maximize mobil-
21 ity, efficiency, and capacity while decreasing conges-
22 tion and travel times;

23 (4) examine the use and integration of multiple
24 data types from multiple sources and technologies,
25 including road weather data, private vehicle (includ-
26 ing Global Positioning System) data, arterial and

1 highway traffic conditions, transit vehicle arrival and
2 departure times, real time navigation routing, con-
3 struction zone information, and reports of incidents,
4 to suggest improvements in effective communication
5 of such data and information in real time;

6 (5) study and propose solutions to the traffic
7 congestion issues on high-traffic roads in the Wash-
8 ington, DC, area to alleviate and prevent gridlock in
9 and around the Nation's Capital, reflecting its sig-
10 nificance as the seat of the Federal Government and
11 headquarters for several critical national security
12 agencies;

13 (6) develop and disseminate suggested strate-
14 gies and solutions to reduce congestion for high-den-
15 sity traffic regions nationwide; and

16 (7) collaborate with other relevant Federal
17 agencies, State and local agencies, industry and in-
18 dustry associations, and university research centers
19 to fulfill its goals and objectives.

20 (c) IDENTIFYING INFORMATION.—The working
21 group shall ensure that information used pursuant to this
22 section does not contain identifying information of any in-
23 dividual.

24 (d) CONGRESSIONAL NOTIFICATION.—The working
25 group shall keep the Committee on Science, Space, and

1 Technology and the Committee on Transportation and In-
2 frastructure of the House of Representatives and the Com-
3 mittee on Commerce, Science, and Transportation and the
4 Committee on Environment and Public Works of the Sen-
5 ate apprised of the activities and progress of the working
6 group at least once every 6 months.

7 (e) REPORT.—Not later than 1 year after the date
8 of enactment of this Act, the working group shall transmit
9 to the Committee on Science, Space, and Technology and
10 the Committee on Transportation and Infrastructure of
11 the House of Representatives and the Committee on Com-
12 merce, Science, and Transportation and the Committee on
13 Environment and Public Works of the Senate a report on
14 its activities under this section, including a transportation
15 strategy that enables our transportation system in and
16 around Washington, DC, to provide mobility in the event
17 of an emergency or natural disaster.

18 **SEC. 6. HIGHWAY EFFICIENCY.**

19 (a) STUDY.—

20 (1) IN GENERAL.—The Assistant Secretary of
21 Transportation for Research and Technology shall
22 examine the impact of pavement durability and sus-
23 tainability on vehicle fuel consumption, vehicle wear
24 and tear, road conditions, and road repairs.

1 (2) METHODOLOGY.—In carrying out the study,
2 the Assistant Secretary shall—

3 (A) conduct a thorough review of relevant
4 peer-reviewed research published during at least
5 the past 5 years;

6 (B) analyze impacts of different types of
7 pavement on all motor vehicle types, including
8 commercial vehicles;

9 (C) specifically examine the impact of
10 pavement deformation and deflection; and

11 (D) analyze impacts of different types of
12 pavement on road conditions and road repairs.

13 (3) CONSULTATION.—In carrying out the study,
14 the Assistant Secretary shall consult with—

15 (A) experts from the different modal ad-
16 ministrations of the Department of Transpor-
17 tation and from other Federal agencies, includ-
18 ing the National Institute of Standards and
19 Technology;

20 (B) State departments of transportation;

21 (C) local government engineers and public
22 works professionals;

23 (D) industry stakeholders; and

24 (E) appropriate academic experts active in
25 the field.

1 (b) REPORT.—

2 (1) IN GENERAL.—Not later than 1 year after
3 the date of enactment of this Act, the Assistant Sec-
4 retary shall publish on a public website the results
5 of the study.

6 (2) CONTENTS.—The report shall include—

7 (A) a summary of the different types of
8 pavements analyzed in the study and the im-
9 pacts of pavement durability and sustainability
10 on vehicle fuel consumption, vehicle wear and
11 tear, road conditions, and road repairs; and

12 (B) recommendations for State and local
13 governments on best practice methods for im-
14 proving pavement durability and sustainability
15 to maximize vehicle fuel economy, ride quality,
16 and road conditions and to minimize the need
17 for road and vehicle repairs.

18 **SEC. 7. INTELLIGENT TRANSPORTATION TECHNOLOGIES.**

19 (a) IN GENERAL.—The Assistant Secretary of Trans-
20 portation for Research and Technology, as part of the In-
21 telligent Transportation Systems research program, with
22 the goal of reducing traffic congestion and vehicle crashes
23 and accelerating testing and research on the introduction
24 of safe, connected, and automated vehicle technology sys-
25 tems, shall—

1 (1) seek to identify and understand—

2 (A) new and innovative vehicle tech-
3 nologies, including active safety technologies,
4 and their safe application in vehicles; and

5 (B) emerging vehicle technologies and ad-
6 vanced communications and sensing techniques
7 that may require additional exploration and un-
8 derstanding by the Department of Transpor-
9 tation of how such technologies work alone and
10 in conjunction with other vehicle and relevant
11 nonvehicle technologies;

12 (2) assess wireless technologies' capabilities to
13 achieve a deployable system in which vehicles of all
14 types (including automobiles, trucks, motor coaches,
15 transit vehicles, and other fleets), traffic signals,
16 other infrastructure systems, pedestrians, motorcy-
17 clists, bicyclists, and mobile devices can interact with
18 and among each other through secure communica-
19 tions, including by conducting rigorous, real-world
20 testing, in cooperation with representatives of the
21 Federal Communications Commission, the National
22 Telecommunications and Information Administra-
23 tion, the automotive, Wi-Fi, cellular, and Intelligent
24 Transportation Systems communities, of viable spec-
25 trum sharing technologies that could enable the safe

1 operation of unlicensed devices, including Wi-Fi, in
2 the 5.9 GHz band without interfering with con-
3 nected and automated vehicle communications; and

4 (3) assist in the development of cybersecurity
5 standards in cooperation with relevant modal admin-
6 istrations of the Department of Transportation and
7 other Federal agencies, including the National Insti-
8 tute of Standards and Technology, to help prevent
9 hacking, spoofing, and disruption of connected and
10 automated transportation applications among sur-
11 face transportation vehicles of all types.

12 (b) REPORT.—Upon completion of the testing de-
13 scribed in subsection (a)(2), the Secretary of Transpor-
14 tation shall send to Congress and the Federal Communica-
15 tions Commission, and publish on a public website, a re-
16 port identifying any potential signal interference risks to
17 connected and automated vehicle communications that
18 may exist due to unlicensed devices, including Wi-Fi, oper-
19 ating in the 5.9 GHz band, including a determination of
20 whether such devices can safely operate in the 5.9 GHz
21 band without creating signal interference that could jeop-
22 ardize or delay the deployment of an effective connected
23 and automated vehicle communications system.

24 (c) ANALYSIS.—In carrying out this section, the As-
25 sistant Secretary of Transportation for Research and

1 Technology shall document and analyze the technologies
2 described in subsection (a), and share results of the anal-
3 ysis with the National Highway Traffic Safety Adminis-
4 tration annually.

5 (d) PRIVACY.—In carrying out this section, the Sec-
6 retary and the Assistant Secretary shall ensure the privacy
7 of individuals.

8 (e) DEFINITION.—In this section, the term “active
9 safety technologies” means technologies which actively as-
10 sist drivers or vehicles in preventing or mitigating a crash.

11 **SEC. 8. RAIL SAFETY.**

12 Not later than 1 year after the date of enactment
13 of this Act, the Assistant Secretary of Transportation for
14 Research and Technology shall transmit to Congress a re-
15 port containing—

16 (1) the results of a study to examine the state
17 of rail safety technologies and an analysis of whether
18 the passenger, commuter, and transit rail transpor-
19 tation industries are keeping up with innovations in
20 technologies to make rail cars safer for passengers
21 and transport of commerce;

22 (2) a determination of how much additional
23 time and public and private resources will be re-
24 quired for railroad carriers to meet the positive train

1 control system implementation requirements under
2 section 20157 of title 49, United States Code; and
3 (3) an identification of technologies that in
4 whole or in part achieve the safety goals of the posi-
5 tive train control implementation requirements
6 under section 20157 that could be implemented
7 sooner than positive train control systems, along
8 with an analysis of the advantages and disadvan-
9 tages, including costs, of incorporating those alter-
10 native technologies to supplement or substitute for
11 positive train control systems.

12 **SEC. 9. UNIVERSITY TRANSPORTATION CENTERS PRO-**
13 **GRAM.**

14 Section 5505 of title 49, United States Code, is
15 amended—

16 (1) in subsection (a)(2)(B) by inserting
17 “multimodal” before “transportation knowledge”;

18 (2) in subsection (b)—

19 (A) by striking paragraph (2) and insert-
20 ing the following:

21 “(2) RESTRICTIONS.—

22 “(A) LIMITATION ON APPLICATIONS.—

23 “(i) IN GENERAL.—A nonprofit insti-
24 tution of higher education may only submit
25 1 grant application described in clause (ii)

1 per fiscal year for each of the transpor-
2 tation centers described under paragraphs
3 (2), (3), and (4) of subsection (c).

4 “(ii) APPLICATIONS.—Applications re-
5 ferred to in clause (i) are applications sub-
6 mitted by a nonprofit institution of higher
7 education—

8 “(I) in an individual capacity,
9 not through participation in a consor-
10 tium of nonprofit institutions of high-
11 er education; or

12 “(II) as the lead institution of a
13 consortium of nonprofit institutions of
14 higher education.

15 “(B) LIMITATION ON AWARDS.—A non-
16 profit institution of higher education may not
17 receive in any fiscal year more than 1 grant
18 under paragraphs (2), (3), and (4) of sub-
19 section (c) based on applications described in
20 subparagraph (A)(ii) of this paragraph.”;

21 (B) in paragraph (4)(B)(iii) by inserting
22 “multimodal” before “transportation prob-
23 lems”; and

1 (C) in paragraph (4)(B)(v)(II) by inserting
2 “, including women and underrepresented popu-
3 lations” after “field”; and
4 (3) in subsection (c)—

5 (A) in paragraph (1), by striking “1 year
6 after the date of enactment of the Transpor-
7 tation Research and Innovative Technology Act
8 of 2012” and inserting “June 1, 2017”;

9 (B) by amending paragraph (3)(E) to read
10 as follows:

11 “(E) FOCUSED RESEARCH.—

12 “(i) COMPREHENSIVE TRANSPOR-
13 TATION SAFETY.—The Secretary shall
14 make a grant to 1 of the 10 regional uni-
15 versity transportation centers established
16 under this paragraph for the purpose of
17 furthering the objectives described in sub-
18 section (a)(2) in the field of comprehensive
19 transportation safety.

20 “(ii) TRAFFIC CONGESTION.—The
21 Secretary shall make a separate grant to 1
22 of the 10 regional university transportation
23 centers established under this paragraph
24 for the purpose of furthering the objectives

1 described in subsection (a)(2) in the field
2 of traffic congestion.”; and
3 (C) in paragraph (4)—
4 (i) by striking subparagraph (B);
5 (ii) by redesignating subparagraphs
6 (C) and (D) as subparagraphs (B) and
7 (C), respectively; and
8 (iii) in subparagraph (C), as so reded-
9 ignated by clause (ii) of this subparagraph,
10 by striking “paragraph” and inserting
11 “section”.

12 **SEC. 10. PRIZE COMPETITIONS.**

13 Section 502(b)(7) of title 23, United States Code, is
14 amended—

15 (1) in subparagraph (D)—
16 (A) by inserting “(such as
17 www.challenge.gov)” after “public website”;
18 (B) by redesignating clauses (iii) and (iv)
19 as clauses (iv) and (v), respectively;
20 (C) by inserting after clause (ii) the fol-
21 lowing:
22 “(iii) the process for participants to
23 register for the competition;”; and

1 (D) in clause (iv) (as redesignated by sub-
2 paragraph (B) of this paragraph), by striking
3 “prize” and inserting “cash prize purse”;

4 (2) in subparagraph (E), by striking “prize”
5 both places it appears and inserting “cash prize
6 purse”;

7 (3) by redesignating subparagraphs (F)
8 through (K) as subparagraphs (G) through (L), re-
9 spectively;

10 (4) by inserting after subparagraph (E) the fol-
11 lowing:

12 “(F) USE OF FEDERAL FACILITIES; CON-
13 SULTATION WITH FEDERAL EMPLOYEES.—An
14 individual or entity is not ineligible to receive a
15 cash prize purse under this paragraph as a re-
16 sult of the individual or entity using a Federal
17 facility or consulting with a Federal employee
18 related to the individual or entity’s participation
19 in a prize competition under this paragraph if
20 the same facility or employee is made available
21 to all individuals and entities participating in
22 the prize competition on an equitable basis.”;

23 (5) in subparagraph (G) (as redesignated by
24 paragraph (3) of this section)—

1 (A) in clause (i)(I), by striking “competi-
2 tion” and inserting “prize competition under
3 this paragraph”;

4 (B) in clause (ii)(I)—

5 (i) by striking “participation in a
6 competition” and inserting “participation
7 in a prize competition under this para-
8 graph”; and

9 (ii) by striking “competition activi-
10 ties” and inserting “prize competition ac-
11 tivities”; and

12 (C) by adding at the end the following:

13 “(iii) INTELLECTUAL PROPERTY.—

14 “(I) PROHIBITION ON REQUIRING
15 WAIVER.—The Secretary may not re-
16 quire a participant to waive claims
17 against the Department arising out of
18 the unauthorized use or disclosure by
19 the Department of the intellectual
20 property, trade secrets, or confidential
21 business information of the partici-
22 pant.

23 “(II) PROHIBITION ON GOVERN-
24 MENT ACQUISITION OF INTELLECTUAL
25 PROPERTY RIGHTS.—The Federal

1 Government may not gain an interest
2 in intellectual property developed by a
3 participant for a prize competition
4 under this paragraph without the
5 written consent of the participant.

6 “(III) LICENSES.—The Federal
7 Government may negotiate a license
8 for the use of intellectual property de-
9 veloped by a participant for a prize
10 competition under this paragraph.”;

11 (6) in subparagraph (H)(i) (as redesignated by
12 paragraph (3) of this section), by striking “subpara-
13 graph (H)” and inserting “subparagraph (I)”;

14 (7) in subparagraph (I) (as redesignated by
15 paragraph (3) of this section), by striking “an agree-
16 ment with a private, nonprofit entity” and inserting
17 “a grant, contract, cooperative agreement, or other
18 agreement with a private sector for-profit or non-
19 profit entity”;

20 (8) in subparagraph (J) (as redesignated by
21 paragraph (3) of this section)—

22 (A) in clause (i)—

23 (i) in subclause (I), by striking “the
24 private sector” and inserting “private sec-
25 tor for-profit and nonprofit entities, to be

1 available to the extent provided by appro-
2 priations Acts”;

3 (ii) in subclause (II), by striking “and
4 metropolitan planning organizations” and
5 inserting “metropolitan planning organiza-
6 tions, and private sector for-profit and
7 nonprofit entities”; and

8 (iii) in subclause (III), by inserting
9 “for-profit or nonprofit” after “private sec-
10 tor”;

11 (B) in clause (ii), by striking “prize
12 awards” and inserting “cash prize purses”;

13 (C) in clause (iv)—

14 (i) by inserting “competition” after
15 “A prize”; and

16 (ii) by striking “the prize” and insert-
17 ing “the cash prize purse”;

18 (D) in clause (v)—

19 (i) by striking “amount of a prize”
20 and inserting “amount of a cash prize
21 purse”;

22 (ii) by inserting “competition” after
23 “announcement of the prize”; and

24 (iii) in subclause (I), by inserting
25 “competition” after “prize”;

1 (E) in clause (vi), by striking “offer a
2 prize” and inserting “offer a cash prize purse”;
3 and

4 (F) in clause (vii), by striking “cash
5 prizes” and inserting “cash prize purses”;

6 (9) in subparagraph (K) (as redesignated by
7 paragraph (3) of this section), by striking “or pro-
8 viding a prize” and inserting “a prize competition or
9 providing a cash prize purse”; and

10 (10) in subparagraph (L)(ii) (as redesignated
11 by paragraph (3) of this section)—

12 (A) in subclause (I), by striking “The Sec-
13 retary” and inserting “Not later than March 1
14 of each year, the Secretary”; and

15 (B) in subclause (II)—

16 (i) in item (cc), by striking “cash
17 prizes” both places it appears and insert-
18 ing “cash prize purses”; and

19 (ii) in item (ee), by striking “agency”
20 and inserting “Department”.

21 **SEC. 11. MOTORCYCLE SAFETY.**

22 (a) STUDY.—The Assistant Secretary for Research
23 and Technology of the Department of Transportation shall
24 enter into an agreement, within 45 days after the date
25 of enactment of this Act, with the National Academy of

1 Sciences to conduct a study on the most effective means
2 of preventing motorcycle crashes.

3 (b) LIMITATION.—The Department of Transpor-
4 tation may not provide a grant or any funds to a State,
5 county, town, township, Indian tribe, municipal, or other
6 local government to be used for any program to check hel-
7 met usage or create checkpoints for an operator of a mo-
8 torcycle or passenger on a motorcycle until the Assistant
9 Secretary submits to the Committee on Science, Space,
10 and Technology and the Committee on Transportation
11 and Infrastructure of the House of Representatives and
12 the Committee on Commerce, Science, and Transportation
13 of the Senate a report on the study required under sub-
14 section (a).

15 (c) SUBMITTAL TO CONGRESSIONAL COMMITTEES.—
16 The Assistant Secretary shall submit the report to the
17 committees as described in subsection (b) within 30 days
18 after receiving the results of the study from the National
19 Academy of Sciences.

20 **SEC. 12. PROHIBITION OF LOBBYING ACTIVITIES.**

21 No funds appropriated to the Secretary of Transpor-
22 tation shall be available for any activity whose purpose is
23 to influence any pending Federal, State, or local legisla-
24 tion, except that this section shall not prevent officers or
25 employees of the United States or of its departments or

1 agencies from communicating to Members of Congress on
2 the request of any Member or to Congress, through the
3 proper channels, requests for legislation or appropriations
4 which they deem necessary for the efficient conduct of the
5 public business. Nothing in this section shall prohibit offi-
6 cers or employees of the United States or its departments
7 or agencies from testifying before any Federal, State, or
8 local legislative body upon the invitation of such legislative
9 body.

10 **SEC. 13. BRIDGE SAFETY.**

11 (a) HIGHWAY AND BRIDGE INFRASTRUCTURE RE-
12 SEARCH AND DEVELOPMENT.—Section 503(b)(3)(A)(i) of
13 title 23, United States Code, is amended by inserting “,
14 including through corrosion prevention measures for
15 structural integrity of bridges” before the semicolon.

16 (b) RESEARCH, DEVELOPMENT, TESTING, AND
17 TRAINING FOR RAILROAD SAFETY.—Section 20108(a) of
18 title 49, United States Code, is amended by inserting “,
19 including corrosion prevention measures and structural in-
20 tegrity of rail bridges” before the period at the end.

21 **SEC. 14. HAZARDOUS MATERIALS RESEARCH AND DEVEL-**
22 **OPMENT.**

23 Section 5118 of title 49, United States Code, is
24 amended—

25 (1) in subsection (a)(2)—

1 (A) in subparagraph (A), by striking
2 “and”;

3 (B) in subparagraph (B), by striking the
4 period at the end and inserting “; and” ; and

5 (C) by adding at the end the following new
6 subparagraph:

7 “(C) coordinate, as appropriate, with other
8 Federal agencies, including the National Insti-
9 tute of Standards and Technology, the Depart-
10 ment of Homeland Security, and the Depart-
11 ment of Energy.”; and

12 (2) by adding at the end the following new sub-
13 section:

14 “(c) COOPERATIVE RESEARCH.—

15 “(1) IN GENERAL.—As part of the program es-
16 tablished in subsection (a), the Secretary may carry
17 out cooperative research on hazardous materials
18 transport.

19 “(2) NATIONAL ACADEMIES.—The Secretary
20 may enter into an agreement with the National
21 Academies to support such research.

22 “(3) RESEARCH.—Research conducted under
23 this subsection may include activities related to—

24 “(A) emergency planning and response, in-
25 cluding information and programs that can be

1 readily assessed and implemented in local juris-
2 dictions;

3 “(B) risk analysis and perception and data
4 assessment;

5 “(C) commodity flow data, including vol-
6 untary collaboration between shippers and first
7 responders for secure data exchange of critical
8 information;

9 “(D) integration of safety and security;

10 “(E) cargo packaging and handling;

11 “(F) hazmat release consequences; and

12 “(G) materials and equipment testing.”.

13 **SEC. 15. WEB-BASED TRAINING FOR EMERGENCY RE-**
14 **SPONDERS.**

15 Section 5115(a) of title 49, United States Code, is
16 amended by inserting “, including online curriculum as ap-
17 propriate,” after “a current curriculum of courses”.

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